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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,176	10/28/2003	Tomonari Horikiri	1232-5185	6564

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EXAMINER	
MOON, SEOKYUN	
ART UNIT	**PAPER NUMBER**
2629	
MAIL DATE	**DELIVERY MODE**
05/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/696,176	HORIKIRI, TOMONARI	
	Examiner	Art Unit	
	Seokyun Moon	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6,8-10 and 13-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6,8-10 and 13-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

The Applicants' arguments filed on January 03, 2007 have been fully considered but they are not persuasive.

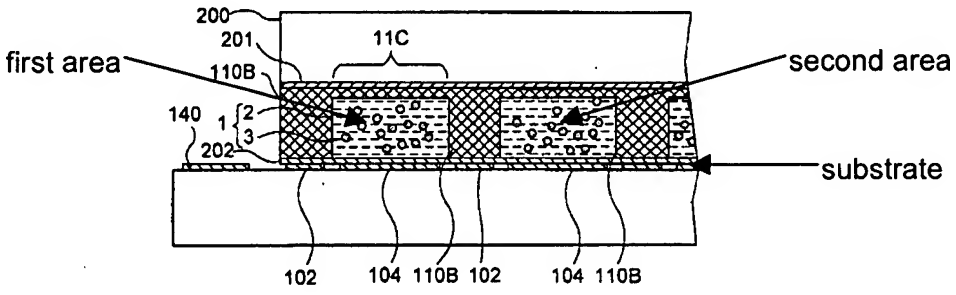
The Applicants have pointed out that neither Katase (US 6,525,865) nor Loxley (US 6,262,833) teaches the amended claim limitation, "*applying a stimulus to a selected area and another stimulus to another selected area of said optical modulation members deposited on said substrate, thereby coloring one of said optical modulation members*".

Examiner respectfully disagrees.

In response to the Applicants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The following rejection explains how the amended claim limitations are still taught by the combination of Katase and Loxley.

Katase [drawing 1 provided below, which is equivalent to fig. 16 of Katase] teaches a first area and a second area of optical members ("*dispersion 1*") deposited on a substrate.



Drawing 1

Katase [col. 19 lines 39-42] also teaches the dispersion being dyed in red, green and blue.

Katase does not expressly disclose a method of coloring the dyes.

However, Loxley teaches an idea of coloring dyes used to present various colors in an electrophoretic display using a stimulus ("*visible* or "*ultraviolet light*") [col. 17 lines 39-42].

It would have been obvious to one of ordinary skill in the art at the time of the invention to adopt Loxley's idea of coloring dyes using a stimulus in order to change the color of the dyes used for changing the color of the dispersion of Katase, in order to allow changing the color of the dyes remotely rather than manufacturing the dyes with predetermined colors.

Since Loxley's idea of applying a stimulus to change the colors of dyes is adopted in each cell or area of the Katase, the combination of Katase and Loxley teaches the claim limitation, "*applying a stimulus* (Loxley: "*visible* or *ultraviolet light*") *to a selected area* (Katase: "*first area*") *and another stimulus* (Loxley: "*visible* or *ultraviolet light*") *to another selected area* (Katase: "*second area*") *of said optical modulation members deposited on said substrate* (Katase: "*substrate*")".

Currently, the rejections of claims 8, 9, 10, and 13-16 made in the previous Final Rejection mailed on November 01, 2006 are maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, **8-10**, and **13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Katase in view of Loxley.

As to **claim 6**, Katase teaches a process for producing an electrophoretic display [abstract lines 1-2] having electrophoretic particles ("*electrophoretic particles 3*") [fig. 16] and a dispersion medium ("*dispersion medium 2*"), and/or a color filter [col. 15 lines 20-30] as optical modulation members comprising steps of:

providing one of the optical modulation members ("*dispersion 1*") with a dye which is colored to one of a plurality of colors [col. 19 lines 39-42],

depositing the optical modulation members on a substrate [drawing 1 provided on page 2 of this Office Action], and

providing a first area and a second area of optical modulation members ("*dispersion 1*") deposited on a substrate.

Katase does not expressly disclose a method of coloring the dyes.

However, Loxley teaches an idea of coloring dyes used to present various colors in an electrophoretic display, using a stimulus ("*visible* or "*ultraviolet light*") [col. 17 lines 39-42].

It would have been obvious to one of ordinary skill in the art at the time of the invention to adopt Loxley's idea of coloring dyes using a stimulus in order to change the color of the dyes used for changing the color of the dispersion of Katase, in order to allow changing the color of the dyes remotely rather than manufacturing the dyes with predetermined colors.

As to **claim 8**, Katase [fig. 14] teaches a step of spatially sealing ("*sealer 202*") hermetically the electrophoretic particles ("*electrophoretic particle 3*") and the dispersion medium ("*dispersion medium 2*").

As to **claim 9**, Katase as modified by Loxley teaches that the coloring step is performed after the hermetically sealing step ("*changing to another color upon irradiation with either visible or ultraviolet light, in encapsulated electrophoretic display*") [Loxley: col. 17 lines 38-46].

As to **claim 10**, Katase as modified by Loxley teaches that the stimuli are selected from the group consisting of thermal energy, light energy, electron ray, y ray, and X ray [Loxley: col. 17 lines 38-41].

As to **claim 13**, Katase as modified by Loxley teaches that the stimuli ("*visible or ultraviolet light*") are applied in a state that the electrophoretic particles and the dispersion medium are encapsulated in a microcapsule [Loxley: col. 17 lines 38-46].

As to **claim 14**, Katase teaches the dye (the dye included in the medium) [col. 19 lines 39-42] being encapsulated in a microcapsule ("*cell having dimension of microns in length*") [col. 9 lines 50-52].

As to **claim 15**, Katase as modified by Loxley teaches that the dye is a nearinfrared absorption ("*visible*") colorant [Loxley: col. 17 lines 38-42].

As to **claim 16**, Katase as modified by Loxley teaches that the dye is a mixture of photosensitive to blue, green, and red light ("*visible light*") [Loxley: col. 17 lines 38-42].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (572) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 15, 2007
- s.m.

SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER